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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,732

06/09/2005

James Nabors

70065

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85981

7590

06/10/2010

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EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

06/10/2010

PAPER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/517,732  
Filing Date: June 09, 2005  
Appellant(s): NABORS ET AL.

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James D. Withers  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 2/18/10 appealing from the Office action  
mailed 07/08/09.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims rejected and pending are 1,2,4,9,11-16,18-25 and 41.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

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subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

### **(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

### **(8) Evidence Relied Upon**

20030096708	AGBAJE et al.	5-2003
6093680	GILLESPIE et al.	07-2000

The Agrochemical Handbook, 3<sup>rd</sup> Edition, A0278/Aug 91.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4,9,11-16,18-25 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agbaje et al. (USAN 2003/0096708; 5/22/03) and The Agrochemical Handbook, 3<sup>rd</sup> Edition, A0278/Aug 91. Agbaje et al. teach a composition comprising glyphosate or salt thereof (abstract, paragraph 120). Agbaje et al. teach that the composition can further comprise metolachlor (S-metolachlor) and excipients such as safeners and Isopar (isoparaffinic hydrocarbons). See paragraphs 107-109,147 and

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165. Agbaje et al. teach a method of applying the composition to soil in order to control undesirable plant growth in crops (see paragraphs 120, 127 and 149). Agbaje et al. teach that the composition can be applied to almost any crop (paragraph 120). Agbaje et al. do not exemplify a composition comprising glyphosate or salt thereof, metolachlor, Isopar and a safener such as benoxacor. Agbaje et al. do not teach a method of applying the composition to the crops listed in claim 19. It would have been obvious to one having ordinary skill in the art to arrive at an invention comprising glyphosate or salt thereof, metolachlor, Isopar and benoxacor as the safener. One would have been motivated do to this since Agbaje et al. suggest this combination of ingredients. Agbaje et al. broadly teach the inclusion of a herbicidal safener as part of the invention which would make the inclusion of any safener, including the instant benoxacor safener, obvious. It would have been obvious to apply the compositions taught in Agbaje et al. to all crop types since Agbaje et al. teach said application in paragraph 120. In addition, The Agrochemical Handbook teaches that metolachlor can be used on maize and cotton crops to control weeds (see reference). The Agrochemical Handbook makes it obvious to modify the method of Agbaje et al. to arrive at instant method which involves the application of the composition onto cotton and maize crops.

#### **(10) Response to Argument**

Appellants argue that Agbaje et al. in Example 4 suggest the combination of lipophilic additive (ISOPAR) with glyphosate rather than with metolachlor. In addition, Agbaje et al. teach metolachlor as an optional herbicide among 192 herbicides that can be added to the glyphosate-ISOPAR combination. Appellants state that there is no suggestion in Agbaje et al. to select metolachlor from the list of 192 herbicides and then combine metolachlor with ISOPAR. Agbaje et al. combined with The Agrochemical Handbook fail to recognize the synergistic benefits associated with Appellants' claimed herbicide composition of claim 1. The synergistic benefit obtained from the addition of

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the lipophilic additive to metolachlor is surprising since the lipophilic additives are not generally thought of as herbicides (Table 2 on page 18). Appellants argue that claim 2 specifies a ratio range of metolachlor:lipophilic additive of 90:1 to 1.5:1 which is not suggested by the combination of Agbaje et al. and The Agrochemical Handbook. Appellants argue that claim 41 specifies a combination of metolachlor, lipophilic additive and benoxacor. The combination of Agbaje et al. and The Agrochemical Handbook would not make obvious the inclusion of benoxacor.

The Examiner argues while it is true that Agbaje et al. do not exemplify the inclusion of metolachlor in a composition comprising glyphosate and isopar, Agbaje et al. do suggest that herbicides such as metolachlor can be added to their compositions comprising glyphosate-isopar. The list of 192 additional herbicides, which includes metolachlor, is finite. For this reason, it would have been obvious to add any herbicide from said list to the glyphosate-isopar composition suggested in Agbaje et al. Thus, Agbaje et al. do not have to exemplify all of the possible composition scenarios in order to render the instant invention obvious. The Examiner agrees that Appellants provide synergistic data in Table 2 for the claimed composition comprising metolachlor and specified lipophilic additive. However, the evidence is not commensurate in scope with the claims, i.e. the synergistic data are to specific ratios of metolachlor:lipophilic additive. On the other hand, claim 1 would include all synergistic combinations of metolachlor and lipophilic additive. However, ample data are not provided to demonstrate that a wide ratio range would yield synergistic results. This analysis is also applicable to the broad ratio range of 90:1 to 1.5:1 for metolachlor:lipophilic additive. Agbaje et al. suggest the addition of excipients such as safeners to their compositions. See paragraphs 107-109, 147 and 165. Agbaje et al. broadly teach the inclusion of a herbicidal safener as part of the invention which would make the inclusion of any

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safener, including the instant benoxacor safener, obvious. One would have been further motivated to add safener in order to avoid herbicidal destruction to the crop. The Agrochemical Handbook is only employ to show that metolachlor is applied to maize and cotton plants. The Agrochemical Handbook makes it obvious to modify the method of Agbaje et al. to arrive at instant method which involves the application of the composition onto cotton and maize crops.

### **(9) Grounds of Rejection**

Claims 1,2,4,9,11-14,16,18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie et al. (USAN 6093680; 7/25/00) and The Agrochemical Handbook, 3<sup>rd</sup> Edition, A0278/Aug 91. Gillespie et al. suggest a composition comprising exogenous chemicals such as metolachlor and an additional herbicide plus excipients such as Isopar V or isoparaffinic oil (column 22 line 36 – column 23 line 43 ) which can be applied to crop (abstract, column 9 line 4 - column 10 line 14, claims 1, 10-15). Gillespie et al. teach that the composition can be applied to almost any crop (column 11 lines 45-60). Gillespie et al. do not exemplify a composition comprising S-metolachlor and Isopar V. Gillespie et al. do not teach a method of applying the composition to the crops listed in claim 19. It would have been obvious to employ any isomer of metolachlor and expect a similar outcome. In the absence of unexpected results, isomers would have been expected to yield similar results because isomers are very similar in structure. It would have been obvious to one having ordinary skill in the art to arrive at an invention comprising metolachlor and Isopar V. One would have been motivated do to this since Gillespie et al. suggest the combination of ingredients. It

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would have been obvious to apply the compositions taught in Gillespie et al. to all crop types since Gillespie et al. teach said application at column 11 lines 45-60. In addition, The Agrochemical Handbook teaches that metolachlor can be used on maize and cotton crops to control weeds (see reference). The Agrochemical Handbook makes it obvious to modify the method of Gillespie et al. to arrive at instant method which involves the application of the composition onto cotton and maize crops.

### **(10) Response to Argument**

Appellants argue that Gillespie et al. do not suggest to an artisan in the field to select metolachlor and subsequently combine the metolachlor with a synergistically effective amount of a lipophilic additive as recited in instant claim 1. Appellants argue that greater herbicidal activity was observed when metolachlor was combined with butyl stearate than when metolachlor was combined with Orchex and Isopar according to Gillespie et al (Examples 6 and 8). Hence Gillespie et al. teach away from the selection of Orchex and Isopar. The Agrochemical Handbook fail to recognize the synergistic benefits associated with Appellants' claimed herbicide composition of claim 1. The synergistic benefit obtained from the addition of the lipophilic additive to metolachlor is surprising since the lipophilic additives are not generally thought of as herbicides (Table 2 on page 18).

The Examiner argues that Gillespie et al. do not have to exemplify all of the possible composition scenarios in order to render the instant invention obvious. The mere fact the Gillespie et al. suggest the combination of metolachlor or S-metolachlor with Isopar makes the instant invention obvious. The Examiner argues that orchex and isopar are used by Gillespie et al. Therefore, it would have been obvious to employ isopar and orchex at the time of Gillespie et al.s' invention. Gillespie et al. may not teach isopar and orchex as preferred ingredients. However, Gillespie et al. do teach that isopar and orchex works. Such teaching is not a teaching away from the use of the less preferred isopar and orchex. 9. The Examiner acknowledges that Appellants provide synergistic data in Table 2 for the claimed composition comprising metolachlor



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and specified lipophilic additive. However, the evidence is not commensurate in scope with the claims, i.e. the synergistic data are to specific ratios of metolachlor:lipophilic additive. On the other hand, claim 1 would include all synergistic combinations of metolachlor and lipophilic additive. However, ample data are not provided to demonstrate that a wide ratio range would yield synergistic results. This analysis is also applicable to the broad ratio range of 90:1 to 1.5:1 for metolachlor:lipophilic additive. The Agrochemical Handbook is only employed to show that metolachlor is applied to maize and cotton plants. The Agrochemical Handbook makes it obvious to modify the method of Agbaje et al. to arrive at instant method which involves the application of the composition onto cotton and maize crops. Gellespie et al. do not teach the instant amounts and ratios of ingredients. However, an artisan would have been motivated to determine the optimum amounts and ratios of ingredients. One would have been motivated to do this in order to make a herbicidal composition that would have been effective at controlling weeds without destroying crops.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alton N. Pryor/

Primary Examiner, Art Unit 1616

Conferees:

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616

/SREENI PADMANABHAN/

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